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ABSTRACT

A collection of forms is provided, each form collecting information on teaching activities relating to a separate environmental education concept. The collection of inventories is designed to: (1) assist teachers in assessing the adequacy of instruction in terms of student conceptual understanding; (2) coordinate scope and sequence of environmental education for teacher teams at the grade or building level; and (3) assist a K-12 district in defining its environmental education program. (RE)

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I-C-E DEVELOPER/DEMONSTRATION PROJECT

ENVIRONMENTAL INSTRUCTION INVENTORY

SE 027 929

ENVIRONMENTAL INSTRUCTION INVENTORY

FOR

1. Teacher: _____

2. Grade/Subject: _____

3. School: _____

4. District: _____

5. Address: _____

_____

6. Date: _____

I-C-E DEVELOPER/DEMONSTRATION PROJECT
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DIRECTIONS

Using the 12 Major Environmental Education Concepts of Project I-C-E as a potential framework for your environmental instruction program, please complete this inventory in stages during the ensuing adoption/adaption period. Following the presentation and discussion of the concepts, please consider what lessons, units, or activities that you already do account for some or all of the concepts involved. Secondly, where concepts are missed, or perchance, inadequately treated in your present instruction, you will be asked to draw upon suggested activities from the I-C-E guides or field models to fill in such voids or inadequacies. A third component provides for special interests or needs. I-C-E can make available activity models, in-depth study guides, or extended units on most environmental topics developed by other nationally recognized environmental programs.

When planning environmental instruction, there is no concern about numerical sequence of the concepts taught, but your instructional design should include some lesson, unit, or activity for each one of the 12 concepts in the program during the year. Because of local interests or needs, some concepts may receive greater emphasis, and consequently, more instructional time. Important, also, for elementary teachers is to consider alternative discipline (subject area) approaches in getting at a concept--that it not rest only with science or social studies. For the secondary level, cooperative instruction is encouraged, i.e., language arts and math, art and social studies, or any other combinations as an effective strategy that reinforces the multi- or interdisciplinary nature of most environmental issues or concerns. In addition, all teachers are urged to use the community and its resources to extend and reinforce classroom learning.

The ultimate goal of this inventory and developmental process over a period of time is designed to serve a number of purposes. First, to satisfy the needs of individual teachers that their environmental instruction program is adequate in terms of student conceptual understanding. Secondly, teacher teams or units at the grade or building level can readily arrive at a scope and sequence for environmental education, secure in the knowledge of a sound program for students that avoids overlap and duplication of effort. And finally, by charting instructional activities for all grades and subject areas, a K-12 district can define its environmental education program on the premise that all teachers need to and are providing for environmental instruction for the primary goal of a change of attitudes and values to sustain a quality life and yet preserve the environment for future generations.

On the pages that follow, each concept is stated, with key identifier underlined. In the three columns that are provided, enter the information called for, starting with the category of "Present (EE) Activities", which you may accomplish quickly by mentally reviewing things you already do and what concepts they relate best to. Some instruction may span several concepts and may well be listed under each one covered. As time permits, a quick review of the I-C-E guides may provide entries for the second category in the inventory to supplement or to fill in voids where your present instructional program misses any of the concepts. The third category would have entries only after your special needs and interests are identified, and you have had a chance to develop or research appropriate units or activities to satisfy such needs or interests.

SAMPLE INVENTORY/ENTRY

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _____

Concept 4 - An adequate supply of clean water is essential to life.

Present Activities	I-C-E Activities	Other Activities
What: Sewage Plant field trip	What: B. Model of Watershed Study, I-C-E Guide p. 44	What: Water study, KARE curriculum activity guide, pp. 12-13
When: April, unit on water resources, science, social studies	When: Feb., unit on water management, social studies	When: May, social studies and language arts units
Resources: filmstrip: "Improving Our Lakes & Streams"	Resources: DNR speaker	Resources: None

The final page in the charting series provides for a summarization of your environmental instruction program. This information should be shared with teachers at similar grade level or subject area, at the building level, and finally, throughout your school system.

Thank you.

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _____

Concept 1 - The sun is the basic source of energy on earth. Transformation of sun energy to other energy forms (often begun by plant photosynthesis) provides food, fuel, and power for life systems and machines.

Present Activities	I-C-E Activities	Other Activities
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _

Concept 2 - All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.

Present Activities	I-C-E Activities	Other Activities
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _

Concept 3 - Environmental factors are limiting on the numbers of organisms living within their influence. Thus, each ecosystem has a carrying capacity.

Present Activities	I-C-E Activities	Other Activities
What: When: Resources:	What: When: Resources:	What: When: Resources:
What: When: Resources:	What: When: Resources:	What: When: Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject:

Concept 4 - An adequate supply of clean water is essential to life.

Present Activities	I-C-E Activities	Other Activities
What: When: Resources:	What: When: Resources:	What: When: Resources:
What: When: Resources:	What: When: Resources:	What: When: Resources:

/IRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _____

ncept 5 = An adequate supply of clean air is essential for life.

Present Activities	I-C-I Activities	Other Activities
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _____

Concept 6 = The distribution of natural resources and the interaction of physical environmental factors greatly affect the quality of life.

Present Activities	I-C-E Activities	Other Activities
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _____

Concept 7 = Factors such as facilitating transportation, economic conditions, population growth and increased leisure time influence changes in land use and population densities.

Present Activities	I-C-E Activities	Other Activities
What: When: Resources:	What: When: Resources:	What: When: Resources:
What: When: Resources:	What: When: Resources:	What: When: Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _____

Concept 8 = Cultural, economic, social and political factors determine our values and attitudes toward the environment:

Present Activities	I-C-E Activities	Other Activities
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _____

Concept 9 - We have the ability to manage, manipulate and change the environment.

Present Activities	I-C-E Activities	Other Activities
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _

Concept 10 - Short-term economic gains may produce long-term environmental losses.

Present Activities	I-C-E Activities	Other Activities
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:
What:	What:	What:
When:	When:	When:
Resources:	Resources:	Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: __

Concept 11 - Individual acts, duplicated or compounded, produce significant environmental alterations over time.

Present Activities	I-C-E Activities	Other Activities
What: When: Resources:	What: When: Resources:	What: When: Resources:
What: When: Resources:	What: When: Resources:	What: When: Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY Teacher: _____ Grade/Subject: _____

Concept 12 - Each person must exercise stewardship of the earth for the benefit of all.

Present Activities	I-C-E Activities	Other Activities
What: When: Resources:	What: When: Resources:	What: When: Resources:
What: When: Resources:	What: When: Resources:	What: When: Resources:

ENVIRONMENTAL INSTRUCTION INVENTORY SUMMARY

Teacher _____ Subject/Grade _____ School/District _____

Concepts	Activity	Discipline Areas												Activity From		Inclass	Community	Month of Use	AV or Media Used		Resource Person Used		Sequence in K-12 System	
		Science	Social Studies	Language Arts	Math	Physical Ed.	Art	Music	Indus. Arts	Home Ec.	Business Ed.	Agriculture	Other	ICE	Other				Yes	No	Yes	No	Yes	No
1. Energy	1																							
	2																							
2. Ecosystems	1																							
	2																							
3. Capacity	1																							
	2																							
4. Water	1																							
	2																							
5. Air	1																							
	2																							
6. Resources	1																							
	2																							
7. Land Use	1																							
	2																							
8. Values & Attitudes	1																							
	2																							
9. Ability for Change	1																							
	2																							
10. Economic Gain/Loss	1																							
	2																							
11. Individual Acts	1																							
	2																							
12. Stewardship	1																							
	2																							